

In the Claims

Current Claims

1 1.(**currently amended**) An apparatus for simulating a pulse and correlated heart beat of an
2 animal, the apparatus comprising a playback device for generating a first electronic signal
3 corresponding to a pulse and a second electronic signal corresponding to a correlated heart beat, a
4 tactile pulse simulator for receiving the ~~pulse~~ first electronic signal and generating pressure pulses
5 simulating an arterial pulse discernible by touch and an audio simulator for receiving the correlated
6 heart beat signal and recreating the heart beat to be heard through a stethoscope.

1 2.(**currently amended**) An apparatus for simulating a right side pulse and a left side pulse and
2 correlated heart beat of an animal, the apparatus comprising a playback device for generating a first
3 electronic signal corresponding to the right side pulse, a second electronic signal corresponding to
4 the left side pulse and a third electronic signal corresponding to a correlated heart beat, a first tactile
5 pulse simulator for receiving the ~~right pulse~~ first electronic signal and generating pressure pulses
6 simulating a right side arterial pulse discernible by touch, a second tactile pulse simulator for
7 receiving the ~~left pulse~~ second electronic signal and generating pressure pulses simulating a left side
8 arterial pulse discernible by touch and an audio simulator for receiving the correlated heart beat
9 signal and recreating the heart beat to be heard through a stethoscope.

1 3.(**withdrawn**) A method for training health care provides in the proper use of a stethoscope
2 including the steps of placing a user's finger on a tactile pulse simulator of the apparatus of claim 1,
3 placing a stethoscope listening end on an audio heart beat simulator, placing stethoscope ear pieces
4 in a user's ear and sensing different cardiovascular conditions including normal and abnormal
5 conditions.

1 4.(**withdrawn**) A method for training health care provides in the proper use of a stethoscope
2 including the steps of placing a first finger on a right side tactile pulse simulator of the apparatus of
3 claim 2, placing a second finger on a left side pulse simulator, placing a stethoscope listening end
4 on a audio heart beat simulator, placing stethoscope ear pieces in a user's ear, generating a pulse and
5 correlated heart beat signal in a playback unit and sensing different cardiovascular conditions
6 including normal and abnormal conditions.

1 **5.(withdrawn)** A system comprising a digital processing unit (DPU) subsystem having a user
2 interface, bodily attribute generation software and an input apparatus and output apparatus for
3 human-DPU interaction, a visual output subsystem, an acoustic output subsystem, and/or a tactile
4 output subsystem, where the input and output apparatus, the generation software and the output
5 subsystems operate to visually, acoustically and tactually simulate different animal including human
6 conditions so that the visual, audio and tactile outputs are temporally coupled for a more realistic
7 simulation of symptoms of a desired condition.

1 **6.(withdrawn)** An apparatus including a digital processing unit (DPU) having a user
2 interface, a bodily attribute generation software and an input device and output device for human-
3 DPU interaction, a visual output device in communication with the DPU, an acoustic output device
4 in communication with the DPU and/or a tactile output device in communication with the DPU,
5 where the DPU, through interaction with a user via the input and output devices, the generation
6 software and the output subsystems, visually, acoustically and/or tactually simulates different animal
7 including human conditions so that the visual, audio and tactile outputs are temporally coupled for
8 a more realistic simulation of symptoms of the desired condition.

1 **7.(withdrawn)** A method for training/teaching a user, where the method includes interacting
2 with a user interface of a DPU via an input apparatus and output apparatus and identifying a
3 condition of an animal including a human from audio, visual and/or tactile output generated in the
4 DPU and outputted to an audio output, a visual output and/or a tactile output which simulate
5 symptoms of the condition from a list of conditions generated by the DPU.

1 **8.(currently presented)** The apparatus of claim 1, wherein the tactile pulse simulator comprises
2 a tactile switch capable of generating pulses simulating the arterial pulse, collapsible tube apparatus
3 or piezoelectric transducer.

1 **9.(previously presented)** The apparatus of claim 1, wherein the tactile pulse simulator and the
2 audio simulator are housed within a housing.

1 10.(currently presented) The apparatus of claim 9, wherein the tactile pulse simulator comprises
2 a resilient cover covering a tactile switch capable of generating pulses simulating the arterial pulse.

1 11.(cancel) The apparatus of claim 9, wherein the housing comprises a simulated upper part of
2 a human body including a simulated chest portion and simulated arm portion.

1 12.(cancel) The apparatus of claim 11, wherein the tactile pulse simulator is located in the arm
2 portion at a wrist portion corresponding to a location used by medical professionals to detect and
3 monitor the patient's arterial pulse and the audio simulator is located within the chest portion.

1 13.(cancel) The apparatus of claim 12, wherein the tactile pulse simulator comprises a resilient
2 cover covering a tactile switch capable of generating pulses simulating the arterial pulse.

1 14.(previously presented) The apparatus of claim 1, wherein the tactile pulse simulator is within
2 in a first housing and the audio simulator is within a second housing.

1 15.(currently amended) The apparatus of claim 14, wherein the first housing simulates a
2 human wrist and the tactile pulse simulator comprises a resilient cover covering a tactile switch
3 capable of generating pulses simulating the arterial pulse and is located at a position in the wrist
4 corresponding to a position in a patient where the arterial pulse is adapted to be detected and
5 monitored by a medical professional.

1 16.(currently presented) The apparatus of claim 2, wherein the tactile pulse simulators comprise
2 tactile switches capable of generating pulses simulating the arterial pulse, collapsible tube
3 apparatuses or piezoelectric transducers.

1 17.(cancel) The apparatus of claim 2, wherein the tactile pulse simulators and the audio simulator
2 are housed within a housing, where the housing comprises a simulated upper part of a human body
3 including a simulated chest portion, a simulated right arm portion and a simulated left arm portion.

1 18.(cancel) The apparatus of claim 17, wherein the right pulse tactile pulse simulator is located
2 in the right arm portion at a right wrist portion corresponding to a location used by medical
3 professionals to detect and monitor the patient's right side arterial pulse, the left pulse tactile pulse
4 simulator is located in the left arm portion at a left wrist portion corresponding to a location used by
5 medical professionals to detect and monitor a the patient's left side arterial pulse and the audio
6 simulator is located within the chest portion.

1 19.(cancel) The apparatus of claim 18, wherein the tactile pulse simulators comprise a resilient
2 cover covering a tactile switch capable of generating pulses simulating the arterial pulses.

1 20.(cancel) An apparatus for simulating a right side arterial pulse and a left arterial side pulse and
2 correlated heart beat of a human, the apparatus comprising:

3 a housing including:

4 a simulated upper human body portion having:

5 a chest portion,

6 a right arm portion, and

7 a left arm portion;

8 a playback device for generating a first electronic signal corresponding to the right side
9 arterial pulse, a second electronic signal corresponding to the left side arterial pulse and a third
10 electronic signal corresponding to a correlated heart beat;

11 a first tactile pulse simulator for receiving the right pulse signal and generating a pressure
12 pulses simulating a right side arterial pulse discernible by touch, where the first tactile pulse
13 simulator is located at an lower inner arm position in the right arm of the housing so that the right
14 pulse can be felt;

15 a second tactile pulse simulator for receiving the left pulse signal and generating pressure
16 pulses simulating a right side arterial pulse discernible by touch, where the second tactile pulse
17 simulator is located at an inner wrist position in the left arm of the housing; and

18 an audio simulator for receiving the heart beat signal and generating an audible recreation
19 of the correlated heart beat, where the audio simulator is located in the chest portion of the housing
20 so that the heart beat can be heard through a stethoscope position on a surface of the chest portion
21 of the housing.

1 21.(cancel) The apparatus of claim 20, wherein the tactile pulse simulators comprise tactile
2 switches capable of generating pulses simulating the arterial pulses, collapsible tube apparatuses or
3 piezoelectric transducers.

1 22.(cancel) The apparatus of claim 20, wherein the tactile pulse simulators and the audio
2 simulator are housed within a housing, where the housing comprises a simulated an upper part of
3 a human body including a simulated chest portion, a simulated right arm portion and a simulated left
4 arm portion.

1 23.(cancel) The apparatus of claim 22, wherein the right pulse tactile pulse simulator is located
2 in the right arm portion at a right wrist portion corresponding to a location used by medical
3 professionals to detect and monitor the patient's right side arterial pulse, the left pulse tactile pulse
4 simulator is located in the left arm portion at a left wrist portion corresponding to a location used by
5 medical professionals to detect and monitor the patient's left side arterial pulse and the audio
6 simulator is located within the chest portion.

1 24.(cancel) The apparatus of claim 23, wherein the tactile pulse simulators comprise a resilient
2 cover covering a tactile switch capable of generating pulses simulating the arterial pulse.

1 25.(previously presented) An apparatus for simulating a right side pulse and a left side pulse and
2 correlated heart beat of a human, the apparatus comprising:

3 a playback device for generating a first electronic signal corresponding to the right side pulse,
4 a second electronic signal corresponding to the left side pulse and a third electronic signal
5 corresponding to a correlated heart beat;

6 a first housing including a first tactile pulse simulator for receiving the right side arterial
7 pulse signal and generating a pressure pulses corresponding to a right arm arterial pulse discernible
8 by touch;

9 a second housing including a second tactile pulse simulator for receiving the left side arterial
10 pulse signal and generating a pressure pulses corresponding to a left arm arterial pulse discernible
11 by touch; and

12 a third housing including an audio simulator for receiving the heart beat signal and generating
13 an audible recreation of the correlated heart beat and designed to be heard through a stethoscope
14 position on a surface of the housing.

1 **26.(previously presented)** The apparatus of claim 25, wherein the tactile pulse simulators
2 comprise tactile switches capable of generating pulses simulating the arterial pulses, collapsible tube
3 apparatuses or piezoelectric transducers.

1 **27.(previously presented)** The apparatus of claim 25, wherein the tactile pulse simulators
2 comprise a resilient cover covering a tactile switch capable of generating pulses simulating the
3 arterial pulse.